

Work Order ID 84064

May-03-12 7:25:22 AM

Ship Monday May 7

84064

Page 1

Item ID: D350-591-312

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Heli-Access-Step, Long RH

Stop

NS2

Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

a

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3272	Rev B
-------	-------

100	0.00
-----	------

100	DOCUMENT CONTROL
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DC	0.00
----	------

Document Control	Photocopy bluefile and type labels as per PPP D350-591-312 CHG001
------------------	---

5/7/03

110	0.00
-----	------

110	Large Fab
-------	-----------

Large Fab	0.00
-----------	------

Large Fab	1-Bevel end for welding FWD ONLY
-----------	----------------------------------

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg
D3272

A/R Aluminum Rod *119785*
120854

3-Grind End Plate flush

5 8

12.05.03

Ae
12.05.03

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84064

Page 2

Item ID: D350-591-312

Accept

N900040100

Setup

Start

NS1

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Stop

NS2

Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

120

120

QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

0.00

*5

0

BE 12/05/03

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

5/05/03

(5)

24

140

140

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

5 0

Ae
12.05.03

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84064

Page 3

Item ID: D350-591-312

Accept

N900040100

Setup

Start

NS1

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Stop

NS2

Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

150

QC

Quality Control

QC3- Inspect Part Finish

0.00

Sirlostap

180

180

Large Fab

Large Fab

0.00

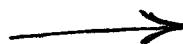
Memo

0.00

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding



4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod 1/1785

6-Grind End Plate flush

7-Install last rivet as per Dwg.

5

Ø

12.05.03

12.05.04

Work Order ID 84064

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Page 4

Item ID: D350-591-312

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Heli-Access-Step, Long RH

Stop

NS2

Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

190

QC10- Inspect visual per QSI004- ground welds

190

QC

Quality Control

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

0.00

5/7/04

200

QC5- Inspect part completeness to step on W/O

0.00

200

QC

Quality Control

0.00

5/7/04

XJ
RM

210

Chemical Conversion Coat per QSI005 4.1

0.00

210

HandFinish

Hand Finishing

0.00

S & SP 12/05/04

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Page 5

Item ID: D350-591-312**Accept****Revision ID:****Item Name:** Heli-Access-Step, Long RH**Start Date:** 5/02/12 **Start Qty:** 5.00***5*****Required Date:** 5/07/12 **Req'd Qty:** 5.00***5*****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run**
Start***NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2*****Sequence ID/
Work Center ID**

220

220

Powdercoat

Powder Coating

**Operation
Description**

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

**Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

220

Memo

11:30

0.00

5X
RHM-F
12/05/14**START TIME:****OVEN TEMPERATURE:****FINISH TIME:**320°F
12:00

230

230

HandFinish

Hand Finishing

Memo

0.00

5

BLD.54.

240

240

QC

Quality Control

QC3- Inspect Part Finish

0.00

8/10/14

5
RH

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Page 6

Item ID: D350-591-312

Accept

N900040100

Setup

Start

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Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

250

250

Packaging

Packaging

Operation
Description

Pick Kit

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

260

QC4- 100% Inspect kits for completeness

0.00

5/6/12

15
PM

260

QC

Quality Control

Memo

270

Packaging

0.00

Memo

0.00

270

Packaging

Packaging

Identify and pack for shipping as per PPPD350-591-312
Location: _____

5/6/12

15
PM

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Page 7

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Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Heli-Access-Step, Long RH

Stop

NS2

Start Date: 5/02/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 5/07/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

280

QC21- Final Inspection - Work Order Release

280

QC

Quality Control

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

0.00

0.00

Memo

MLJ 12/05/08

MF
12-05-07

Picklist Print

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Page 1

Work Order ID: 84064

Parent Item: D350-591-312

Start Date: 5/02/12

Required Date: 5/07/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A04.03.22New issue KJ/RF

IPP Rev:B 07-06-09 Added D3572-1 JLM

IPP Rev:C 08-04-02 ECN1163 DD verified by:EC

IPP Rev:D 08-04-08 ECN1164 DD verified by:EC

10.04.28 verified by:EC IPP Rev:D fixe route seq in bom DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3272-1 Step		Manufactured	No			110	Each	20.0000	1	5			
-----------------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

Location	Loc Qty	Loc Code
ST B84100	-10	5
WA 83729	30	
83730	10	
	10	

D3067-1 End Plate		Manufactured	No			110	Each	142.0000	1	5			
----------------------	--	--------------	----	--	--	-----	------	----------	---	---	--	--	--

Location	Loc Qty	Loc Code
WA B80881	78	5
78608	4	
81969	74	
WA016	64	
67582	2	
68214	1	
79607	1	
83053	60	

Picklist Print

May-03-12 7:25:21 AM

Page 2

Work Order ID: 84064

Parent Item: D350-591-312

Start Date: 5/02/12

Required Date: 5/07/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 5.00

Required Qty: 5.00

D3219-1
Plate

Manufactured No 110 Each 283.0000 2 10

112-05-03

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	84	
82221	84	
WA016	78	
73410	12	
77674	6	
<u>81292</u>	60	10
WA017	121	
81971	121	

D3066-1
Spacer

Manufactured No 180 Each 61.0000 2 10

Ac 12.05.03

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	61	
<u>81968</u>	61	10

MS20600-AD4W4
Rivets

Purchased No 180 Each 2,724.0000 16 80

Ac 12.05.03

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST321	2724	
121011	9	
<u>121340</u>	715	
<u>121444</u>	2000	

D3065-041
Step Leg Assembly Hi

Manufactured No 180 Each 39.0000 1 5

Ac 12.05.03

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	39	
66149	0	
79336	1	
<u>83368</u>	38	5

Picklist Print

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Work Order ID: 84064

Parent Item: D350-591-312

Start Date: 5/02/12

Required Date: 5/07/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 5.00

Required Qty: 5.00

D3067-1
End Plate

Manufactured No 180 Each 142.0000 1 5

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	78	
78608	4	
<u>81969</u>	74	5
WA016	64	
67582	2	
68214	1	
79607	1	
83053	60	

Purchased No 250 Each 78.0000 2 10

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST353	78	
<u>120644</u>	28	10
<u>120717</u>	50	

Manufactured No 250 Each 99.0000 2 10

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST481	99	
<u>81970</u>	99	

Manufactured No 250 Each 48.0000 0 5

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST481	48	
82015	40	
<u>83361</u>	8	5

Picklist Print

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Work Order ID: 84064

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 5/02/12

Required Date: 5/07/12

Start Qty: 5.00

Required Qty: 5.00

AN960JD416

Washer

NAS1149D0463J

Purchased

No

250

Each

30.0000

16

80

M121205

AN960JD516

Washer

NAS1149D0563J

Purchased

No

250

Each

0.0000

4

20

M19717

AN5-36A

Bolt

Purchased

No

250

Each

124.0000

2

10

B2618

Bushing

Manufactured

No

250

Each

150.0000

2

10

D2230-3

Lug

Manufactured

No

250

Each

7.0000

3

20

B81962

125/7

Location Loc Qty Loc Code

ST351 30 _____

116289 10 _____

119097 20 _____

Location Loc Qty Loc Code

340 100 _____

121181 100 _____

ST340 24 _____

120731 24 _____

Location Loc Qty Loc Code

ST012 150 _____

76130 2 _____

80474 148 _____

ST480 7 _____

53881 4 _____

70973 1 _____

81558 2 _____

Picklist Print

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Page 5

Work Order ID: 84064

Parent Item: D350-591-312

Start Date: 5/02/12

Required Date: 5/07/12

Parent Item Name: Heli-Access-Step, Long RH

Start Qty: 5.00

Required Qty: 5.00

D2856-400

Manufactured

No

250 f 311.5345

1.2

6

Abrasion Strip

cut (2) D2856-400-720 as per dwg

*5/5
Lynne
8/21/12*

Location Loc Qty Loc Code

ST403	216	
81875	216	
ST409	95.5345	
63735	0.6696	
68076	0.3149	
71164	8.46	
79551	86.09	

6

*MS21042L3
Nut*

Purchased

No

250 Each 3,076.0000

2

10

Location Loc Qty Loc Code

ST300	3076	
117441	16	
117885	32	
118451	5	
118927	3	
119017	1131	
119075	138	
121349	751	
121444	1000	

10

*5/5
AN4-13A
Bolt*

Purchased

No

250 Each 793.0000

8

40

Location Loc Qty Loc Code

ST357	793	
118838	8	
119449	39	
120187	19	
120422	2	
120770	400	
121162	325	

8

32

Picklist Print

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Work Order ID: 84064

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 5/02/12

Start Qty: 5.00

Required Date: 5/07/12

Required Qty: 5.00

MS24042L5
Nut

Purchased No 250 Each 1,221.0000

50 10

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST300	1221	
116105	5	
116548	43	
117611	30	
119109	1143	

MS21042L4
Nut

Purchased No 250 Each 5,262.0000

8 40

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST300	5262	
119075	312	
121011	1950	
121444	3000	

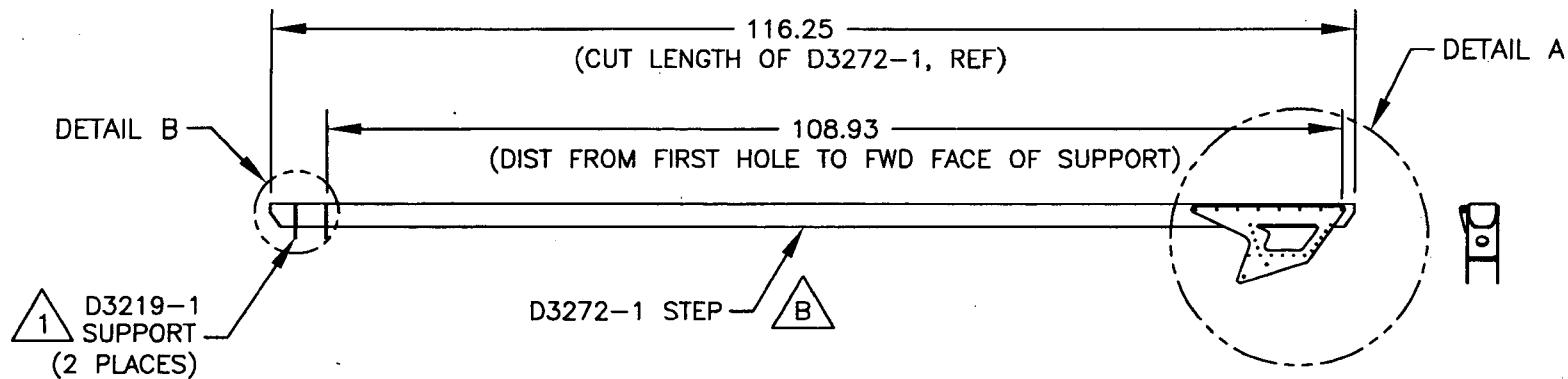
AN960JDT0
Washer

NAS1149D0363J Purchased No 250 Each 0.0000

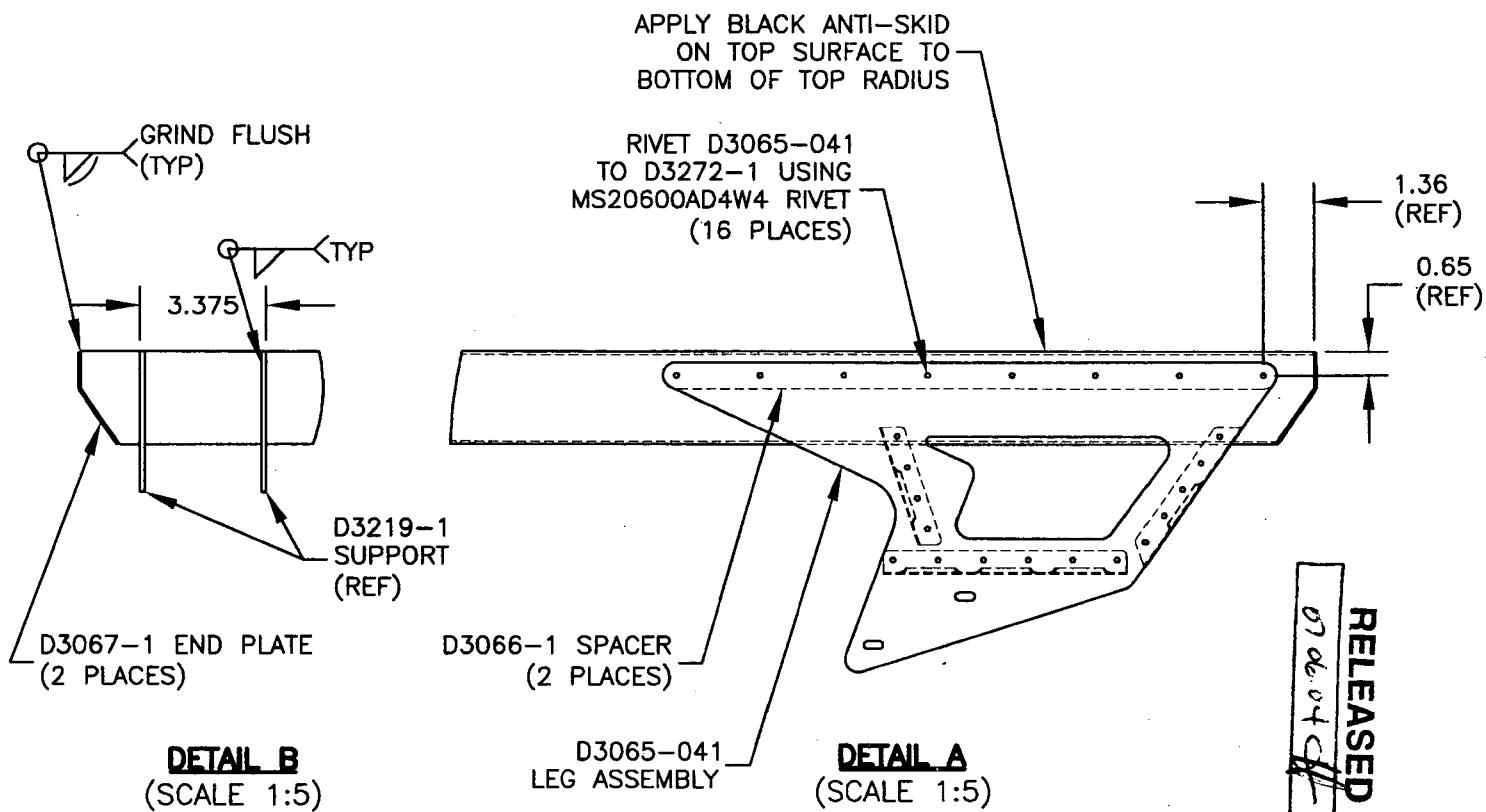
4 20

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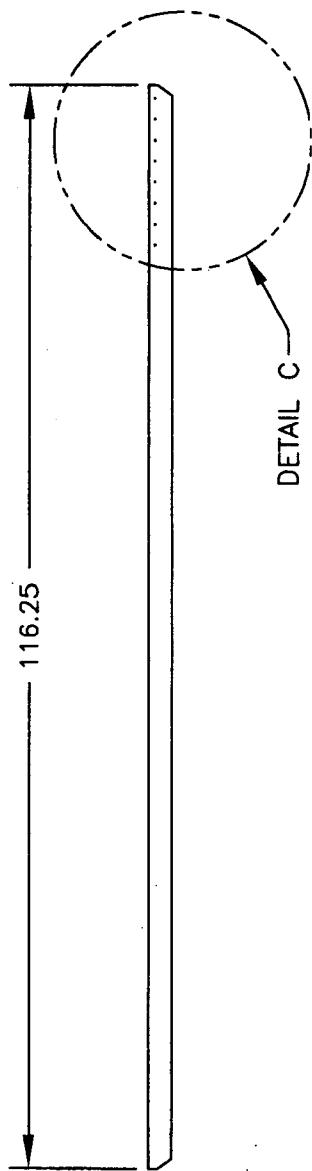
D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)



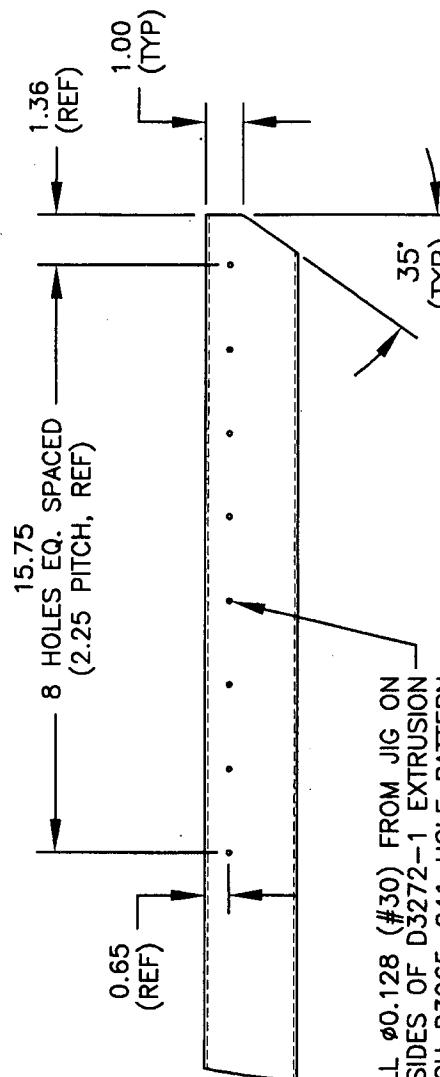
DESIGN	DRAWN BY	DART AEROSPACE LTD	
		HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
<i>CE</i>	<i>WT</i>	D3272	
DATE	TITLE		SHEET 2 OF 3
07.05.18	STEP ASSEMBLY, HI LONG		1:20
			SCALE

DART

DESIGN <i>QP</i>	DRAWN BY <i>BS</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CE</i>	APPROVED <i>SH</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20



B D3272-1 STEP
(MAKE FROM D2622-120 STEP EXTRUSION)



RELEASED
07.06.04 *SH*

DETAIL C
(SCALE 1:5)

DART

DESIGN <i>QP</i>	DRAWN BY <i>AB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CE</i>	APPROVED <i>HF</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 2
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG NTS	
A	04.03.01		NEW ISSUE
B	07.05.18		D3272-1 WAS D2622-120

RELEASED

07 06 04-*HF*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

WLO 8/10/04

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Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	(Qty) -312	Part Number	Description
X								D350-591-211	Heli-Access-Step™, Long Step – High Skid, LH
	X							D350-591-212	Heli-Access-Step™, Long Step – High Skid, RH
		X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
			X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
				X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
					X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
						X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
							X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8					2	2	D2274	RADIUS BLOCK
							2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2	2		AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore NOT REQUIRED to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.